



Managerial intentions for and employee perceptions of group-based incentives – social exchange theory based interpretations

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Abstract

Purpose The paper interprets and compares managerial intentions for and employee perceptions of group-based incentive systems.

Design/methodology/approach The data comprise of interviews with managers and employees in four Finnish firms with experience of company-wide incentive systems involving profit-sharing and team-based rewards. Benefitting from social-exchange theory, we examine managers' intentions and employees' perceptions.

Findings Managers' and employees' views resemble each other concerning profit-sharing as reflecting reciprocity rooted in perceived distributive fairness, whereas examination of the team-based rewards revealed impediments in reciprocity. While managerial intentions for team-based rewards refer to social exchange with economic intensity via selection of controllable performance measurements aimed at making individual-level effort count, the employees' perceptions deem such metrics non-controllable, reflecting perceived distributive and procedural unfairness.

Practical implications Profit sharing seems to create fair social obligation and goal congruence between managers and employees, whereas team-based incentives easily suffer from unfairness, reducing their effectiveness.

Originality/value Distinguishing between managerial intentions and employee perceptions pertaining to incentive systems facilitated in-depth exploration of the social exchange inherent in them, conceptualised in terms of economic intensity, fairness, and controllability. With this lens, qualitative analysis revealed differences in interpretations of controllability and fairness between the managerial intentions and employee perceptions. The central contribution to scholarship takes the form of interpretations reflecting upon these key findings.

Keywords: managerial intention, employee perception, team-based reward, profit-sharing, social-exchange theory

1 Introduction

This paper compares managerial intentions for and employee perceptions of group-based incentive systems for employees including profit-sharing and team-based rewards. It responds to the need for separating managerial intentions and employees' perceptions of management control systems (Tessier and Otley, 2012), with a specific focus on reward systems. For example, Nyberg et al. (2018) in their meta-analysis prove the positive performance effects of profit-sharing and team-based rewards, but they call for research that theorises and elucidates the mechanisms by which group-based incentives work, recognising both top-down and bottom-up processes of them: "*Managerial intent flows from the top, but the behaviors that pay systems motivate emerge from the bottom. Understanding these contrasting flows requires careful attention to collective PFP [pay for performance] throughout the organization, ...*" Nyberg et al., 2018, p. 2460). We still have a limited understanding of employee perceptions concerning management controls. While Tessier and Otley (2012) acknowledge both managerial intentions and employee perceptions, they focus on the former. Moreover, when the perceptions of employees has been studied, the focus has been on the employees on managerial levels (e.g. Burkert et al., 2011; Giraud et al., 2008).

One approach to answer these calls is to acknowledge that the incentive effect of group-based incentive systems is anchored in social exchange creating an expectation of reciprocal behaviour: the people giving something expect to receive something in return (see Emerson, 1976). Prior literature indicates that managers and employees perceive incentive systems differently. Managers typically view compensation schemes from the angle of economic incentives, and render the clear connection between employees' effort and rewards, whereas employees have more varied perceptions (Magnan and St-Onge, 2005; Heath, 1999). Therefore, managerial intentions may not correspond to the world of employees (Tessier and Otley, 2012), posing difficulties to design effective incentive

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3 systems that exhibit goal congruence (Jakobsen and Lueg, 2014; Cugueró-Escofet and
4 Rosanas, 2013). For identifying these similarities and differences, we explore the intentions
5 for and perceptions of social exchange, with a special emphasis on concepts of incentives'
6 intensity (Zenger and Marshall, 2000; Zenger and Marshall, 1995), fairness (Colquitt *et al.*,
7 2001) and controllability (Jakobsen and Lueg, 2014; Giraud *et al.*, 2008).
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15 We use qualitative field study method to identify common features of group-
16 based incentive systems among managers and employees to contrast managerial and
17 employee perspectives. We interview managers and employees to make comparative
18 analysis of how managers and employees give meaning to their experiences on these group-
19 based incentive systems. We analyse them with the help of social exchange theory
20 (Emerson, 1976), to give interpretations of these differences between managerial intentions
21 and employee perceptions and potential consequences of these intentions and perceptions on
22 profit-sharing and team-based rewards.
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34 Our context involved non-management-level group-based incentive systems in
35 four Finnish companies where managers and employees have experience of both profit-
36 sharing and team-based reward schemes. This setting is fitting for our purposes because in
37 Finland, group-based incentives are the norm and the country's egalitarian cultural
38 environment meshes with them naturally (see Fehr & Gächter, 2000; Pekkarinen & Riddell,
39 2008). We carried out interviews, 37 in total, with managers and other employees. This
40 setting allowed us to compare between managerial intentions for and employee perceptions
41 of various types of group-based incentives and thereby answer the following research
42 questions: **What similarities and differences exist and why between managerial**
43 **intentions for and employee perceptions of group-based incentive systems from the**
44 **perspective of social-exchange theory?** The process of answering these questions yielded
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3 interpretations to holistically understand the possible outcomes of group-based incentive
4 systems and consequently, their effectiveness.
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8 Our findings contribute to the literature on incentive systems in the following
9 ways. Firstly, by situating our comparative analysis within the framework of social exchange
10 theory (see Emerson, 1976), we can flesh out a more comprehensive picture of how the
11 group-based incentive systems work, considering both economic and fairness-based
12 exchange at the same time. Secondly, we reveal differences between them in terms of
13 managerial intentions and (non-management-level) employee perceptions in the same study
14 (Tessier and Otley, 2012). We specifically explore the concept of controllability *vis-à-vis*
15 fairness endangering goal congruence despite any good managerial intentions (Jakobsen and
16 Lueg, 2014; Cugueró-Escofet and Rosanas, 2013; Burkert *et al.*, 2011; Giraud *et al.*, 2008)
17 in order to elucidate both top-down and bottom-up processes of group-based incentives
18 (Nyberg *et al.*, 2018). Third, we illustrate, that these nuanced interpretations of concepts can
19 be analysed well via careful analysis of qualitative data wherein interviews cast light on
20 subjective interpretations that might otherwise remain hidden (see Hoque *et al.*, 2013).
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37 The paper is structured such that the conceptual framework is presented next.
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39 With this background in place, the third section describes the research methods and data.
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41 Section 4 provides empirical analysis of the data and presents our interpretations. The final
42 section lays out our conclusions.
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48 **2 Theoretical and conceptual guidelines**

49 *2.1 Managerial intentions and employee perceptions*

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51 Recently, there has been calls for separating managerial intentions and employee perceptions
52 to understand, how and why certain management control systems (MCS) do work in
53 organizations (Tessier and Otley, 2012). According to Tessier and Otley (2012, p. 175),
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60 “[m]anagerial intentions ... refers to what managers trying to achieve by implementing a

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3 control and is a design attribute of the MCS. Employee perceptions, however, refers to
4 employees' interpretation of what the control is for and, therefore, is not a design attribute
5 of the MCS." Perceptions of management control tools are important, since the effectiveness
6 of controls hinges on the consequent behaviours (Merchant and Van der Stede, 2012;
7 Dulebohn and Martocchio, 1998). While incentive systems' constituent performance
8 measurements, target-setting, and evaluation connected to monetary rewards are designed to
9 bring about particular motivating and informing, it is the perception that determines the
10 behavioural responses to managerial controls that feature incentives (Birnberg *et al.*, 2006)
11 and the consequent performance (Burkert *et al.*, 2011). For a fuller sense of what contributes
12 to incentives' effectiveness or lack thereof, it is important to be aware of the differences
13 between managerial intentions and employee perceptions (Heath, 1999). The outcome of
14 these incentives may deviate greatly from the managerial intentions (see Cugueró-Escofet
15 and Rosanas, 2013; Tessier and Otley, 2012), if employee perceptions differ from these
16 intentions. Perception may contain positive, neutral and negative emotional attitudes towards
17 controls, and these attitudes very much define the consequences of controls. However,
18 managers can influence, but not fully control, employee perceptions with the presentation of
19 controls, which is a bridge between managerial intentions and employee perceptions (Tessier
20 and Otley, 2012).

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22 In our study, we aim to identify and analyse similarities and differences
23 between managerial intentions and employee perceptions, to make interpretations about
24 group-based incentives' effectiveness that would have general interest. If our comparison
25 reveals strong commonality between managerial intentions and employee perceptions, one
26 could presume that incentives create goal congruence and most likely result in expected
27 behavioural effects (Cugueró-Escofet and Rosanas, 2013). Considering the middle ground is
28 crucial too: where there is partial overlap, those parts of intentions and perceptions outside
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3 the area of goal congruence are far from irrelevant, since even seemingly small differences
4 may lead to undesired consequences (Jakobsen and Lueg, 2014). Figure 1 presents the
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6 general setting of the study reported upon here.
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10 [Take in Figure 1]
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14 2.2 The social exchange in incentive systems 15

16 We apply social exchange theory to compare managerial intentions for and employee
17 perceptions of group-based incentives, as it offers theoretical bases for such a comparison
18 between organisational levels and perspectives (Nyberg *et al.*, 2018). According to social
19 exchange theory, the aim behind social exchange is to create reciprocity: “*a resource will*
20 *continue to flow only if there is a valued return contingent upon it*” (Emerson, 1976, p. 359).
21 In the context of incentive systems, it entails employers giving bonuses to the employees in
22 the expectation of the workers putting in greater efforts in exchange, and vice versa. The
23 employer may also intend to show benevolence toward the employee via bonuses and,
24 through the bonus scheme, create a social obligation to perform (Bottom *et al.*, 2006; Coyle-
25 Shapiro and Kessler, 2003). Accordingly, the social obligation, the incentive effect of group-
26 based incentives, comprises both economic and psychological contracts with mutual obligations
27 (Fehr and Falk, 2002; Emerson, 1976). On the other side, employees assess whether these
28 mutual obligations are honoured creating perceptions of fairness (Harrington and Lee, 2015).
29 With this framing, social-exchange theory acknowledges that employer’s intentions for
30 incentive system may not fully correspond to how the employee perceives it (Fehr and Falk,
31 2002).
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53 A significant proportion of management control literature is devoted to
54 exploring the social exchange in incentive systems from the economic perspective of how to
55 construct high-intensity incentive systems that create solid economic incentives to strive
56 hard (Merchant and Van der Stede, 2012; Birnberg *et al.*, 2006). Here, the concept of
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3 **intensity** denotes the individual-level marginal pay gains activated via the specific person's
4 performance within the economic incentive scheme. The controllability of the measured
5 performance is an important prerequisite for intensity to make the relationship between
6 performance and incentive payment clear (Jakobsen and Lueg, 2014; Zenger and Marshall,
7 1995).

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15 The discussion above crystallises the fact that intensity, offers only a partial
16 platform from which to assess the social exchange inherent in group-based incentive systems.
17 Prior studies indicate that perceived fairness of incentive systems leads to positive
18 behavioural effects, enhancing organisations' performance (e.g., Zapata-Phelan *et al.*, 2009;
19 Colquitt *et al.*, 2001). Accordingly, managers may try to affect this perception by presenting
20 the incentive system in a way creating positive attitudes among employees and an impression
21 of being fair when designing and applying an incentive system (Lau and Martin-Sardesai,
22 2012; Van Herpen *et al.*, 2005). As fairness creates social obligations (Bottom *et al.*, 2006),
23 prior research has used theory addressing organisational justice to conceptualise perceived
24 **fairness** (Colquitt *et al.*, 2013), placing emphasis on the role of fairness in fostering
25 reciprocity. Dulebohn and Martocchio (1998) have shown that fairness plays an important
26 role specifically in group-based incentives. Hence, we consider this concept further,
27 considering its elements of procedural, distributive, and interactional fairness (see Colquitt *et al.*,
28 2001).

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47 The first of these denotes the fairness of the **procedures** used to evaluate
48 performance and to set bonuses (Greenberg, 1986). Perceived procedural fairness of the
49 decision-making processes is influenced by how much input the agent in question can have
50 to the process; that is, does the agent participate in setting targets or ground rules, in the
51 means of gathering information, or in decision-making such that the procedures would be
52 free from bias (Thibaut and Walker, 1978)? In addition, fair procedures should ensure
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3 consistency of bonus allocations across people and time, and they should proceed from
4 accurate information (Leventhal, 1980; for a review of these factors, see Colquitt *et al.*,
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8 2013). Rewards with understandable and clear performance evaluation and achievable
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10 targets are often perceived procedurally fair (cf. Hartmann *et al.*, 2010; Fitzgerald, 2007).
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12 While research has looked at how the choice of performance measurements affects perceived
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14 procedural fairness, it has yielded inconsistent results as to whether or not various financial
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16 or non-financial, objective or subjective measurements are seen to be fair (Sholihin and Pike,
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18 2013; Hartmann and Slapničar, 2012; Hartmann *et al.*, 2010; Lau and Sholihin, 2005). This
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20 suggests that the premises behind the fairness perceptions merit further exploration.
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24 The foundation of perceived **distributive fairness** resides in outcomes, i.e.
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26 how equally or equitably the benefits are distributed (Colquitt *et al.*, 2013; Greenberg, 1990).
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28 Equal distribution refers even allocations of rewards among peers, creating social harmony
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30 (Leventhal, 1980), while in equitable distribution (Adams, 1965) perceived fairness refers to
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32 the benefits gained in proportion to the effort exerted by the various people or groups
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34 involved (Birnberg *et al.*, 2006). The distributive fairness of group-based rewards may be
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36 evaluated both within group and between groups, but we do not know how people perceive
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38 these different aspects of distributive fairness from one situation to the next (Furnham,
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40 1988). Studying group-based incentives provides a fruitful setting of exploring this
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42 distinction (Nyberg *et al.*, 2018). The perceptions of distributive fairness relate to the amount
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44 of money paid and the validity of performance measurements (e.g., Burney *et al.*, 2009) as
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46 well as equally challenging targets for all employees (Fitzgerald, 2007).
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51 **Interactional fairness** is perceived in managerial enactment and
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53 implementation decisions (Colquitt *et al.*, 2013) and is affected by the interactions between
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55 people over the course of the evaluation process (Harrington and Lee, 2015). This shows in
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57 the way supervisors use the procedures (Giraud *et al.*, 2008) and present the management
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controls (Tessier and Otley, 2012). Perceptions of interactional fairness comprises **interpersonal** (the degree to which people are treated politely, with respect, and as having dignity) and **informational** (a concept referring to the explanations people are given that convey information on why procedures were used in a certain manner or why outcomes were distributed in a certain fashion) (Colquitt *et al.*, 2001). Accordingly, it is not only the organisational processes that affect the perceived fairness but also how one's superiors execute and present those procedures (Tessier and Otley, 2012; Greenberg, 1990). If processes as such are objectively deemed just, but they are presented and implemented insensitively, the perceived fairness of those processes is going to be low (Merchant and Van der Stede, 2012).

Controllability not only plays an important role for the intensity of incentives, but also in perceived fairness of social exchange (Giraud *et al.*, 2008). It denotes that employees should only be held accountable for what they can control under a material time span (Merchant and Van der Stede, 2012), meaning that the employees should be able to affect the probability of output distribution by their own effort (Antle and Demski, 1988). Controllability has a twofold effect on perceived procedural fairness. Firstly, do employees have control over the measured performance as defined via the selected performance metrics? Secondly, whether the employees are able to influence the choice of performance measurements and target setting (Jakobsen and Lueg, 2014). While the controllability principle is well known, the perceptions of controllability and its effects have been rarely investigated with the exceptions of Giraud *et al.* (2008) and Burkert *et al.* (2011), who study managerial perceptions of controllability. Giraud *et al.* (2008) show that the perceived fairness of uncontrollable performance measurement on managerial levels depends on whether the uncontrollability is internal or external to their organisational unit. According to them, internal uncontrollable factors, such as interdependencies between units, create

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3 perceptions of distributive unfairness, whereas external uncontrollable factors do not have
4 such an effect. In contrast, subjectivity in procedures intended to neutralise the influence of
5 external factors on evaluations may themselves create perceptions of procedural unfairness,
6 but being held accountable for effects of external uncontrollable elements does not create
7 perceptions of unfairness. It has also been suggested that controllability can be violated on
8 managerial levels in order to get information of manager's performance (Antle and Demski,
9 1988). These findings indicate that managers are both supposed and willing to pay attention
10 to important matters occurring outside the organisation (Burkert *et al.*, 2011). Moreover,
11 Burkert *et al.* (2011) show that top-level managers are better able to cope with non-
12 controllability than middle level managers are. Accordingly, non-controllability may have
13 even more dysfunctional effects on non-managerial levels. In fact, Burkert *et al.* (2011)
14 conclude that from individual employee's perspective controllability is positive, while from
15 the organisational perspective, not applying controllability principle may also have some
16 benefits meaning that if the managers consider the organisational perspective, the managerial
17 intentions and employee perceptions regarding controllability may well differ.

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38 Based on the above discussion, Figure 2 depicts our conceptual framework of
39 social exchange in relation to group-based incentive systems.

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45 [Take in Figure 2]
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49 **3 The research design**

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51 We adopt a qualitative field study method to explore differences and
52 similarities between managerial intentions and employee perceptions and to identify general
53 features across our case firms. Qualitative field studies collect data in the domain 'field' and
54 employ 'qualitative' methodology (Ahrens and Chapman, 2006). Accordingly, we collected
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3 data by the means of semi-structured interviews in four Finnish firms that had used a group-
4 based incentive system for all personnel in 2010-2011. In total, 37 interviews were carried
5 out, representing the various organisational levels: four interviews (one in each firm) with
6 HR representatives in corporate management and 12 with representatives of middle
7 management. The rest of the interviews were with non-managers, representing diverse jobs:
8 four blue-collar workers, nine lower-level white-collar workers, and eight higher-level
9 white-collar workers. Details of the interviews are presented in the appendix. Two distinct
10 interview guides were used, one to capture the corporate-level views of HR management
11 personnel and the other for middle managers' and employees' views. The interviews with
12 HR representatives covered the design of the incentive system, reasons for its
13 implementation, and historical developments, alongside the expectations and perceived
14 behavioural effects of the system. The other interviews solicited a description of the
15 employee's work and thoughts on the role of pay and the composition of the compensation
16 package as a whole. In addition, this set of interviews covered factors in one's motivation
17 and commitment to the firm, especially in relation to the incentive system.

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38 The setting offers a good opportunity to compare managerial intentions and
39 employee perceptions, because Finland (similarly to other Nordic countries) has an egalitarian
40 culture, wherein pressure toward equality is strong even with regard to performance-based
41 incentives, leading to less intensity of individual-specific incentives (Pekkarinen and Riddell,
42 2008). Group-based performance-based incentives instead are used extensively. Accordingly,
43 Jones, Kalmi, Kato, and Mäkinen (Jones *et al.*, 2012) found that 66.9% of the Finnish firms in
44 their sample applied group-based incentives, and Ikäheimo, Kallunki, Moilanen, and Schiehl
45 (2018) identified the average performance-based incentive to fixed salary is only 1.78%.
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Even though the performance-linked incentives are not large, the egalitarian culture gives

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3 added weight to the system's very existence and to other aspects of how it is perceived, not
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5 merely the incentives' economic intensity.
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8 Two of the firms were manufacturing firms operating in the food industry
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10 (*FoodA* and *FoodB*), one was a sales-oriented service organisation in the financial sector
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12 (*BankCo*), and the final one was active in wholesale-business management (*RetailCo*). The
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14 selection of these companies was fruit of discussions with representatives of the
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16 Confederation of Finnish Industries and their recommendations pertaining to companies
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18 possessing long-term experience with incentive systems that cover the whole organisation.
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21 General information on the firms is presented in Table 1.
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26 [Take in Table 1]
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30 The incentive systems of our case firms typically combined profit-sharing and
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32 incentives for smaller groups (where we will use the term 'team-based rewards' for the latter
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34 from here on, regardless of whether the groups are teams or departments striving for common
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36 goals or looser groups delineated for the purposes of the incentive system itself). Two of the
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38 case firms used bonuses based on individual-level performance alongside the group incentives.
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40 The maximum bonus differed from 420 euros to two month's pay. The whole systems were
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42 based on corporate-level approach of performance measurement (such as Balanced
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44 Scorecard), including also non-financial perspectives. While in other firms the incentive
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46 system was in place when the interviews were conducted, *FoodB* had abandoned its
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48 incentive system about two years prior to the interviews, in response to comprehensive re-
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50 evaluation of its compensation systems. The interviewees at *FoodB* were thus able to
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52 compare between the era in which there had been a group-based incentive system and the
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54 time since abandonment of that system. Table 2 summarises the fundamentals of the
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60 incentive systems in the firms studied.

[Take in Table 2]

As field study is appropriate for replicating the logic in a series of cases to validate the inferences drawn from other cases (Eisenhardt, 1989), we collected data from companies in several industries. Identifying similarities across the companies enables us to characterise and compare perspectives of managers and employees in order to give interpretations of these similarities and differences, and this will help us to explore complexities, paradoxes and dilemmas within and across case firms and this social reality is made sense with reference to theories that can illuminate these activities (Ahrens and Chapman, 2006), ultimately resulting to conceptualisation and theorisation of the phenomena. Accordingly, while analysing semi-structured interviews as qualitative data enables us to shed light on subjective interpretations of the effectiveness of incentive systems (Hoque *et al.*, 2013), using case companies in different industries to validate our interpretations (Eisenhardt, 1989), the study takes a pragmatist way of thought straddling between subjectivist and objectivist positions (Lukka and Modell, 2010; Kakkuri-Knuuttila *et al.*, 2008). Moreover, pragmatism fits well with the premise of deeming behavioural responses to management controls being determined by (inter-)subjective perceptions (Lukka and Modell, 2010).

Compatible with the pragmatist way of thought, our analysis followed abductive reasoning, where prior theoretical knowledge provides knowledge in search for explaining empirical observations (Lukka and Modell, 2010). First, we used open and selective coding (Neuman, 2007) assisted by NVivo software. Open coding enabled us to identify the most important themes discussed and later perform second-stage coding for further analysis of these themes. The first-stage themes covered topics such as the characteristics of the incentive system, the objectives for it and its development but also the meanings connected with the system and its deficiencies. Initial coding was performed for the full dataset, and the

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3 extracts coded for particular themes were then grouped in accordance with the associated
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5 level of the organisation. Despite the differences between the interview guides, at this point
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7 we noticed that managers at all levels spoke at considerable length about the intentions for
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9 the incentive system and the general effects of rewards on their employees, rather than the
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11 systems' effects on themselves, which afforded comparison between managerial intentions and
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13 employee perceptions.
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17 Upon review of the results from the first-stage coding, we noticed that the
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19 meanings described were compatible with particular ideas from social-exchange theory, but
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21 what the interviewees described were collections of these ideas rather than representing a
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23 certain theoretical framework. Accordingly, the second-stage analysis of the data employed
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25 selective coding in line with the conceptual framework depicted in Figure 2. The iterations of
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27 analysis ultimately led us to the patterns described and analysed in the following sections.
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33 **4 Comparing managerial intentions and employee perceptions**

34 *4.1 The general intentions for group-based incentive systems*

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37 From the perspective of the corporate-level management, a group-based incentive system
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39 communicates target-orientation and the need for profitability:¹
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44 [F]rom the firm's perspective, we want [employee work with a] focus on the
45 goals of the firm. (Corporate-level HR manager, *RetailCo*)
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48 [T]he main principle still is that with [the incentive system] we can sustain the
49 interest of the employees and their focus on the work [...] which has
50 everything to do what we are trying to achieve. (Corporate-level HR manager,
51 *FoodA*)
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53 These higher-level visions were considered to be within reach by the middle-level managers
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55 too. They firmly believed that the incentive system does affect employees' behaviour:
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59 ¹ In section 4, referred quotes are examples of all quotes, which illustrate the phenomena.
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3 Yes, I do believe that [the bonus system] has a steering effect [...] this is my
4 opinion. I do believe that it somewhat steers [behaviour]. (Middle-level
5 manager, *FoodA*)
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8 If I were in this position [but without the bonus system], I would feel that I
9 would run out of means [...] to spur on the employees. (Middle-level manager,
10 *BankCo*)
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12 It is also about what you do and that you do the right things. (Middle-level
13 manager, *BankCo*)
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17 An idea behind the incentive system often was to distribute a portion of the profits to
18 everyone. The owners and management believed that the system, in so doing, communicated
19 reciprocity between the owners and employees. The following extracts illustrate managers
20 finding it fair that an equitable share from the firm's performance is distributed to the
21 employees:
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28 [T]he owners say it too, when we have discussed this with them (we go
29 through it every year), how the [incentive] system will be. So the owners are
30 quite open about it that they feel it is right that if they get more money, the
31 employees will get their share too. (Corporate-level HR manager, *FoodA*)
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34 [W]e have always had this kind of trisection for the [part of the] operating
35 margin [that is better than budgeted]. One part has always been for the
36 workers, one part for the firm, and one part [allocated] to the owners. This has
37 always been an accepted principle, and everyone has agreed that this is the way
38 it should be. (Corporate-level HR manager, *FoodB*)
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42 In addition, the managers expressed a sense that distributing part of the profit to the
43 employees, whether that distribution is based on profit-sharing or on team-based rewards,
44 creates a social obligation for the employees, encouraging them to make an effort on the
45 firm's behalf. This obligation can be communicated in numerous ways. One extreme
46 example is threatening to scrap the incentive system if the outcome of wage-related
47 collective bargaining is not to the employer's liking:
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55 Yes, it is used as an argument [in negotiations that we have this system,
56 including profit-sharing and team-based rewards, that could be abandoned]
57 [...] because it is a unilateral decision by the employer for us to have this kind
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3 of [incentive] system. And we agree on how it is executed on an annual basis
4 with the owners. (Corporate-level HR manager, *FoodA*)
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8 A more positive way of conveying the value of the group-based incentive system is to make
9
10 its existence part of the image of the company as an employer:
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12 [W]e have tried to bring our incentive system into our image as an employer.
13 We try to talk about it more, and it is an important thing in the field [for
14 encouraging people in the labour market] to come to us or to stay with us as
15 compared with other options... (Corporate-level HR manager, *RetailCo*)
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19 Accordingly, the managerial intentions emphasise that the existence of the
20
21 group-based incentive system in its own right informs employees not only about the targets,
22
23 but also about the employer's benevolence (Bottom *et al.*, 2006) by means of distributive
24
25 fairness (Van Herpen *et al.*, 2005). This psychological contract may be presented in positive
26
27 terms, but it may also be an asset in bargaining (Tessier and Otley, 2012), which could be seen
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29 as a reference to informational fairness – i.e., to how the procedures and distribution are
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31 communicated (Giraud *et al.*, 2008; Colquitt *et al.*, 2001).
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35 In the domain of target-orientation, the employees' perception regarding
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37 incentive systems seemed to be similar to managerial intention. Employees stated that the
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39 targets steer their behaviour as individuals, so long as the targets and metrics are defined
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41 reasonably:
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44 One does pay more attention to those things that are [part of the incentive
45 system]. It does affect things somewhat. (Lower level white-collar worker,
46 *FoodA*)
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49 Absolutely, I do follow [my performance relative to the targets], because I am
50 a person who cannot accept not reaching one's targets. So they do steer a
51 person such as I. That's why I'm here, to perform as I am required to. (Upper-
52 level white-collar worker, *BankCo*)
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56 The employees also acknowledged the owners' benevolence and stressed that they valued it.
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58 While one would expect performance-based bonuses in sales-oriented organisations, people
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3 at firms of other types saw the reciprocity reflected in the incentive system as something
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5 special:

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8 But I come from the retail industry, where they do not have anything like this
9 [group-based compensation]. Therefore, I have been really excited that one can
10 even get something extra. (Lower level white-collar worker, *BankCo*)
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14 However, the system's existence does more than reflect benevolence of the employer in
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16 general; there was a feeling of equitability of distribution *vis-à-vis* the firm's owners.
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20 Of course, there is the positive factor that when the firm is doing well, it gives
21 some part of [the result] to the employee. (Blue-collar worker, *FoodA*)
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24 This equitability also conveyed a sense of needing to work together for the firm-level results:
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26 [W]hen I do my best, it has an effect. And that creates a collaborative spirit.
27 (Blue-collar worker, *FoodA*)
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29

30 And when the targets are branch-level, it is even more based on our shared value
31 of co-operation. Because this is a line of business where you cannot know
32 everything about everything and, therefore, we need to work together. (Lower
33 level white-collar worker, *BankCo*)
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37 Accordingly, the employee perceptions acknowledge both the information
38
39 content of the incentive system and the benevolence of the employer distributing part of its
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41 gains to the employees. The common understanding can be conceptualised on the basis of
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43 equitability (distributive fairness) between the owners and the employees. Hence, one can
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45 conclude that, in general terms, managerial intentions and employee perceptions are
46
47 substantially similar in what the existence of a group-based incentive system indicates, and
48
49 we posit that such reciprocity is important for goal congruence (Cugueró-Escofet and Rosanas,
50
51 2013) and perceptions creating positive employee attitudes (Tessier and Otley, 2012), which
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53 may lead to better employee performance.
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4.2 Team-based rewards

Managers in our case companies emphasised the importance of positive perceptions of the reward system among employees and the employees' control over the performance. Therefore, managers rendered pivotal that employees have controllable performance measurements, which are as close as possible to their daily work:

We have settled on the important measurements, which are kind of natural, ones related to [day-to-day] work, which can be influenced. (Corporate-level HR manager, *BankCo*)

For the managers, measurements applied close to the employees that consider controllable performance should enable the employees to collect bonuses related to their own effort, which rendered team-based rewards important. Moreover, setting achievable targets was cited as important; managers considered attainability in terms of making all targets equally challenging:

The way this goes is that every department thinks of its own target and then [...] the targets reach the management team [of the factory] and we review them. Our job is to make the targets equally challenging. In some cases, we have to raise the target level [...]. Obviously, as a person, I want to make them achievable, but as a manager, I have to create both target-orientation and equitability. (Middle-level manager, *FoodA*)

There was awareness that inter-team equitability may not dovetail with controllability of the measured performance in cases of complex jobs. For instance, the work of experts often entails major difficulties with appropriate performance measurements and target-setting:

One problem is that we cannot get reasonable metrics for each group, measurement that would really steer the work of each specific person... For those who do more office work as an expert, it is really difficult to find such a measurement... (Middle-level manager, *FoodA*)

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3 Interestingly, one manager noticed that there is a danger of focusing too much
4
5 on finding metrics for controllable performance, which would risk the firm's strategic goals
6
7 and continuous development:
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10 In the beginning, we had only output measurements or something related to
11 cost-efficiency [...]. But we should focus more on these kinds of development-
12 based measurements... maybe we were stuck in the mindset that the metrics
13 should be close to the worker and didn't think, beyond that, that those
14 measurements should have been more closely linked to our strategy.
15 (Corporate-level HR manager, *FoodB*)
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19 The discussion above illustrates that managerial intentions emphasise the
20
21 controllability in incentive systems. This demonstrates a desire for greater intensity to create
22
23 economic incentives for solid efforts. Therefore, the team-based measurements are essential
24
25 in managerial intentions for creating positive attitudes and guaranteeing that individuals'
26
27 effort counts toward their incentive pay.
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31 Employee perceptions seldom present the team-based incentive systems as
32
33 providing any real economic incentives, since the employees do not consider them intensive
34
35 at all. The amount of the reward was sometimes considered too low to create any social
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37 obligation to put in more work effort:
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40 Well, if we talk about [the efficiency measurements], if we hit the target, it is
41 about 19 euros, less taxes, per month. You can imagine that this won't make
42 me run for the whole month. (Blue-collar worker, *FoodA*)
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44
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46 While collaborative spirit was praised, there was also serious discontent with
47
48 the fact that team-based performance was not controllable enough by individual employees.
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50 Non-controllability was cited as one of the chief reasons behind the negative perceptions of
51
52 the incentive system that *FoodB* had abandoned:
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55 [T]here was this interrelationship with another department. If we reached our
56 targets and they did not, it affected the bonus for all of us. (Blue-collar worker,
57 *FoodB*)
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3 Although employees in most cases could discuss the selection of both metrics
4 and target levels with their supervisors, and make suggestions for them, they did not perceive
5 that these procedures ensure the controllability of the measured performance:
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10 I don't remember whether it is every second year that the metrics for our team
11 are selected. In any case, there have never been any measurements that I could
12 have any influence on. (Lower-level white-collar worker, *FoodA*)
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17 Furthermore, when measurements of team-based performance were closer to the individual,
18 employees perceived unfairness if the targets of other teams were not as challenging as their
19 own. Hence, employees often deemed the distribution of incentive payments unfair:
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25 No matter how much we did, [...] we never got it [the bonus]. So we felt that it
26 was unfair, and it created bitterness when you saw that your neighbour [in
27 another department] got it easily without much trying, even though it was not a
28 large sum of money. (Lower-level white-collar worker, *FoodB*)
29
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31

32 The remarks demonstrated an intimate connection between controllability and
33 views of the distribution's fairness. When the measured performance or target-setting is not
34 controllable by the employees, inequitable distribution of bonuses can result. However, in
35 some cases it may be considered fair if one receives bonuses based on the good performance
36 of others. This was witnessed in *FoodA*, where kitchen workers and cleaners belonged to the
37 same team. This team's performance measurements addressed items such as wastage of
38 foodstuffs (for kitchen workers) and the quantity of paper towels used in the personnel toilets
39 (for cleaners). The cleaners could receive some reward for the kitchen's work being good even
40 if the cleaners' own targets were not met:
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52 [B]ut in the canteen kitchen we have had good results, and then [also the
53 cleaners] benefit from it. [Separation between the two groups] would be unfair
54 [...] since the cleaners cannot control what the performance metrics measure
55 and if they did not get any bonuses while we in the kitchen can control [the
56 measured results] and get bonuses. (Blue-collar worker, *FoodA*)
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3 Whatever efforts may have been made to the contrary, employees often
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6 experienced the targets as having been decided somewhere else already. The targets were
7
8 perceived as being passed down from above, and they were seen as too hard to reach:
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10 [T]he case was such that the target levels were raised every year so much that
11 you never had the possibility of reaching them. It does not really motivate you
12 if the targets are always just raised. (Blue-collar worker, *FoodB*)
13

14
15 Last year, we had a target in our team that we could make three mistakes in the
16 course of the year, and if we made those three mistakes, the bonus for [that
17 year] was lost. And I know that some of my colleagues have a zero-mistake
18 target now [...]. We discussed the targets, but when these targets came last
19 spring they had already decided this. (Upper-level white-collar worker,
20 *RetailCo*)
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24 The quotations above indicate that procedures featuring target-setting that is beyond
25 employees' influence seem to lead to a sense of unfair procedures behind the team-based
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27 rewards.
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31 Based on the above, employee perceptions about incentive systems reflect
32 procedural and distributive fairness. The employee perception of team-based incentives often
33 refers to the unfairness of those incentives, which created somewhat negative attitudes and
34 hampered the creation of social obligation that group-based incentives could create.
35
36 Perceptions as to fairness were tied in with not only the selection of the metrics and the
37 controllability of the measured performance as a reflection of procedural fairness but also the
38 fact the level of effort exerted by one's peers affects one's own bonus, for good or ill
39 (Jakobsen and Lueg, 2014; Fitzgerald, 2007). The perception tends to focus on lack of
40 procedural fairness: there was a sense that non-achievable targets are set at higher levels of
41 the organisation (Fitzgerald, 2007). Although the managers usually presented that the
42 employees can discuss and suggest measurements and targets in their incentive system,
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44 employees often expressed a sense that in practice the targets are decided upon somewhere
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46 else. This implies that the procedures do not necessarily materialise as intended or presented,
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3 and that the target-setting is indeed something the employees cannot control (Leventhal,
4 1980). Alongside these factors, there is the issue of differences in the amount of effort
5 required for reaching the respective groups' targets and thereby reaping similar rewards.
6
7 Distributive fairness is, therefore, another major variable in employee perception of team-
8 based rewards (Fitzgerald, 2007; Birnberg *et al.*, 2006). For employees, distributive fairness
9 is related to controllability, unlike in the managers' view. Such differences between
10 intentions and perceptions question the positive performance effects, which are the idea of
11 group-based incentives and managers intend to create. Interestingly, interactional fairness is
12 not directly visible in the employees' discourse pertaining to incentive systems².
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24 Based on the discussions above, Figure 3 depicts the main findings from the
25 comparison between managerial intentions for and employee perceptions of team-based
26 rewards.
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33 [Take in Figure 3]
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38 4.3 Profit-sharing

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40 The interviewed employees indicated that controllability was not an issue in cases of targets
41 set and incentives paid in line with company performance:
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45 As I have been working in payroll, I have seen many bonus payments, of very
46 different companies, bonuses connected to the firm-level profit, but if you
47 think that there shouldn't be such targets that you cannot affect in any way...
48 Of course, you cannot affect the firm-level profit either, but [they are better if
49 you think that] that way the same share is given to everyone if we reach the
50 target. (Upper level white-collar worker, *RetailCo*)
51

52
53 The controllability is an issue, how much you can affect the performance
54 assessed with those metrics. If you cannot, then I do not think the system works
55 well. But, on the other hand, with our actions we can keep [the whole firm]
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59 ² For the most part, these issues were discussed in more general terms, connected with motivation, but not
60 considered in relation to the incentive system.

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3 profitable and then get a bonus [...]. The firm-level profit has been discussed,
4 because in a way it is unequal, since some get their whole bonus on the basis of
5 the firm-level profit. So we are not even able to get our full bonus in practice.
6 If [*FoodA*] is doing well, those at the higher levels [in the organisation] will get
7 the whole eight per cent. We get four per cent, based on the firm-level profit,
8 and then from our own metrics a little over one per cent on average. [...]. I
9 completely understand that they want to have measurements close to us that we
10 could affect, but... (Blue-collar worker, *FoodA*)
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15 While the latter quote reflects positive perceptions of consistent definition of the bonuses in
16 profit-sharing, afforded by similar procedures for calculating the rewards, it shows also that
17 the distribution of bonuses can still bring perceptions of unfairness. This was specifically the
18 case when some employees had a larger proportion of their bonus based on firm targets,
19 which was considered as the preferable way to pay bonuses.
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26 In a contrast to the view characterised in the previous section, employee
27 perception does not hold that controllability poses a problem when the measurement of
28 performance takes place at a higher level of the organisation. Employees have positive
29 attitudes towards profit-sharing-type incentives as they deem them to be fair, since everyone
30 receives a bonus on the same grounds. This perception considers both distributive and
31 procedural fairness, as the basis for the bonus is identical for all employees. The procedures
32 for defining the bonus are seen as independent of the individual, thereby related to
33 procedural fairness. As for distributive fairness, the employee perception articulates equal
34 distribution of bonuses between peers. For the employees, the level of peer-to-peer
35 equitability connected with uncontrollability was not perceived to pose a problem in
36 profit-sharing as it was in team-based incentive systems. Therefore, controllability does not
37 feature in the employee perception of profit-sharing. This is in sharp contrast to managerial
38 intentions, which implicitly regard non-controllability as a bugbear of profit-sharing that
39 needs to be addressed via supplemental, team-based rewards.
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3 Figure 4 summarises the main results from the comparison between managerial
4 intentions for and employee perceptions of profit-sharing, which are rather similar. Both
5 reflect equitability with respect to the owners. The social exchange encompasses both
6 procedural and distributive fairness. Perceptions of distributive fairness are nurtured by the
7 equal distribution of bonuses with peers, while inequity in the bonus-to-effort ratio
8 between peers is not considered to be an issue. Accordingly, it seems that profit-sharing
9 created positive attitudes that could realise the goal congruence and positive performance
10 effects of group-based incentives
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24 [Take in Figure 4]
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31 **6 Concluding discussion**

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33 For our comparison between managerial and employee views on group-based incentive
34 systems that cover all personnel, we collected data at multiple levels in four companies. The
35 dataset covered HR representatives, middle managers, and non-management employees from
36 different work environments. More importantly, in explaining our findings we
37 conceptualised these views as managerial intentions and employee perceptions to understand
38 the effectiveness of such incentive systems (Tessier and Otley, 2012). We took the work
39 further by analysing these intentions and perceptions in light of contributions from social-
40 exchange theory, accounting for the perspectives of economic intensity and fairness in
41 connection with the concept of controllability.
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54 Our research contributes to the body of knowledge in the field by
55 distinguishing between managerial intentions for and employee perceptions of one part of
56 management controls, incentive systems, considering both in the same study. We describe
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3 how managers intend to present the incentive system and how employee perceptions create
4 positive and negative attitudes towards different parts of the system (Tessier and Otley,
5
6 2012). Moreover, as we analyse intentions and perceptions within the framework of social
7
8 exchange theory, we are able to highlight similarities and differences that are important with
9
10 regard to goal congruence and positive performance effects (Cugueró-Escofet and Rosanas,
11
12 2013). Synthesising the two sets of perspectives, and acknowledging both economic and
13
14 fairness-related ways of creating social obligations, we are able elucidate the top-down and
15
16 bottom-up mechanisms of group-based incentives (Nyberg *et al.*, 2018), which are crucial to
17
18 the effectiveness of incentive systems. Analysing qualitative data was especially useful in
19
20 teasing out the differing interpretations of controllability and fairness between these levels
21
22 that might otherwise have remained hidden (Hoque *et al.*, 2013). The results suggest that
23
24 when group-based incentives utilise suitable measurements, incentives create reciprocity and
25
26 thus inform and steer behaviour as the managers intended. Intentions and perceptions seem to
27
28 be congruent between managers and employees with regard to profit-sharing also, with
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30 reciprocity being accorded the focus – reflecting equitability as distributive fairness as the
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32 owners distribute their gains with the employees. Such group-based incentives may thus
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34 create positive attitudes and performance effects.
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43 However, identifying suitable measurements remains a challenging task, which
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45 stems from the differences between managerial intentions and employee perceptions. Firstly,
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47 there are notable distinctions to be made in how controllability is linked to the social
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49 exchange. While managerial intentions focus on increasing the intensity of group-based
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51 incentive systems' incentives through team-based metrics for controllable performance, in
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53 employee perceptions the team-based incentive systems neither represent controllability nor
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55 create intensity. In fact, employees found the team-based performance, as measured, to be
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57 almost always uncontrollable, creating unfairness. For employees, the notion of
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3 controllability may denote diverse things: it encompasses not only measured performance
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5 but also the effect of peers on the final result and the actual (non-)participation in target-
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7 setting. All these issues in combination affect the amount of fairness perceived. In employee
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9 perceptions, how controllable team-based incentives are reflects the level of procedural
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11 fairness: do employees have an actual say in setting the targets relevant for them and in the
12
13 choice of metrics (Fitzgerald, 2007; Thibaut and Walker, 1978)? The targets related to team-
14
15 based incentives were often perceived to be uncontrollable, in that employees indicated
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17 feeling that they were not truly involved in the target-setting process and that the selection of
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19 performance metrics was related to performance that they could not themselves control. We
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21 conclude that conceptualisations of controllability of target-setting and views on whether the
22
23 measured performance is controllable or not in team-based incentive systems seem to
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25 constitute a difference between managerial intentions and employee perceptions, whereas
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27 this is not the case for profit-sharing. While managers do not want to violate controllability
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29 and intend to create positive employee perceptions and attitudes towards the incentive
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31 system by team-based measurements, employees' attitudes towards those measurements are
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33 rather negative. These findings are in line with evidence that managers, in pursuit of good
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35 worker performance, seem to overemphasise the value of economic incentives behind group-
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37 based rewards (Heath, 1999) and see that profit-sharing needs to be complemented by
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39 performance measurements under employee control (Magnan and St-Onge, 2005). On the
40
41 other hand, if the targets are not met, employees readily explain this by the uncontrollability
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43 of the measured performance and of the target-setting. If not addressed, these discontinuities
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45 can fundamentally endanger the creation of reciprocity in team-based incentive systems and
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47 hamper the positive performance effects.
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56 More importantly, our findings enhance our understanding of the mechanisms
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58 by which group-based incentives might work, by adding empirical support to the earlier
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3 conceptual suggestions that managers' intentions do not consider employee perceptions and
4 reality when designing a performance measurement and incentive system (Jakobsen and
5 Lueg, 2014; Tessier and Otley, 2012). Our findings, although focusing on one part of
6 management control systems, add to this discussion as they explain the difference in
7 perspectives when one is analysing the perceived fairness of incentive systems. Namely,
8 while Hartmann and Slapničar (2012) have pointed in this direction, and others have
9 identified a need to develop our understanding of how non-management employees perceive
10 incentive systems, our results reveal employees' nuanced interpretations of the relationship
11 between fairness and controllability. A role of distributive unfairness is manifested in
12 employee perceptions, wherein setting targets on a team-by-team basis that differ in the
13 associated metrics leads to objectives that are unequally challenging, and one's individual-
14 level efforts may not count much toward the reward, since it depends on the output of the
15 whole team (Birnberg *et al.*, 2006). Therefore, inequity represents a problem of team-
16 based incentive systems and violating controllability causes negative attitudes (Burkert *et al.*,
17 2011). Controllability does not seem to play any role in employee perception in the context
18 of profit-sharing, though, since the performance is measured far from the employee (i.e., by
19 profits) and everyone gets the bonus on the same grounds. When performance is measured at
20 such a high level, the relevant peers are not as visible, so inequity does not pose a
21 problem, which reflects the equality dimension of distributive fairness and overplays the
22 possible negative effects of violating controllability (Burkert *et al.*, 2011). Thus, procedural
23 and distributive fairness are related differently to controllability in the employee perceptions,
24 depending on whether performance is measured at team or instead company level. This
25 shows that the inconsistencies may be explained with the aid of a comprehensive view set
26 within the framework of social-exchange theory (Emerson, 1976). These nuanced
27 interpretations of controllability by non-management-level employees enhance our
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3 understanding of controllability (cf. Burkert *et al.*, 2011; Giraud *et al.*, 2008). In an echo of
4 the findings of Giraud *et al.* (2008) with regard to managers, we found that employees
5 identified inequity in the inter-peer comparison in team-based reward systems, and the
6 choice of performance measurements and corresponding targets were perceived to constitute
7 internal uncontrollabilities that profit-sharing renders external (Giraud *et al.*, 2008). Profit-
8 sharing thus brings equality with one's peers into focus.
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17 Our results indicate that managers put stress on the controllability of
18 performance measurements and intend to create group-based incentive systems that mirror
19 high-economic-intensity (individual-based) incentive programmes even though group-based
20 incentive systems for employees are, by their very nature, not highly intensive. Therefore,
21 one practical implication of our study for HR management is that there may be value in
22 shifting the focus from identifying the best possible performance metrics to developing an
23 incentive system that covers all personnel, and present it as equitability between owners and
24 employees, which would create a perception of reciprocity. It seems that violating
25 controllability is of company's interest in the case of profit-sharing-type incentives in order
26 to show the company's benevolence and create a social obligation, since social obligation
27 may be more important than the direct economic incentive when all employees are part of
28 the group-based incentive system. To inform such decisions, being aware of the employees'
29 perspective rather than relying on an **image** of it is therefore vital. Team-based incentives
30 seem to be problematic, but there may be potential in this regard too: getting employees truly
31 involved in a design process that creates procedural fairness and focusing on distributive
32 fairness both within each team and across teams should lead to group-based incentive
33 systems that support better performance.
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56 As with any research, the limitations need to be acknowledged in connection
57 with our study. The heavy reliance on interviews in only a few firms in a specific cultural
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3 context is a hallmark of the explorative nature of the study, as is the attention to what people
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5 say rather than what they do. Another limitation of the work is that, instead of presenting a
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7 conclusive theory, we could only present limited interpretations with the help of social
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9 exchange theory.
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Appendix: Details of the interviews

	Level in the organisation	Firm	Month of interview	Duration
Managers	Corporate HR management	<i>BankCo</i>	May 2010	60 min
	Corporate HR management	<i>FoodA</i>	April 2010	80 min
	Corporate HR management	<i>FoodB</i>	May 2010	45 min
	Corporate HR management	<i>RetailCo</i>	May 2010	60 min
	Middle management	<i>BankCo</i>	March 2011	55 min
	Middle management	<i>BankCo</i>	March 2011	65 min
	Middle management	<i>BankCo</i>	March 2011	55 min
	Middle management	<i>FoodA</i>	January 2011	37 min
	Middle management	<i>FoodA</i>	January 2011	31 min
	Middle management	<i>FoodA</i>	February 2011	38 min
	Middle management	<i>FoodB</i>	February 2011	60 min
	Middle management	<i>FoodB</i>	February 2011	44 min
	Middle management	<i>FoodB</i>	March 2011	35 min
	Middle management	<i>RetailCo</i>	December 2010	40 min
	Middle management	<i>RetailCo</i>	December 2010	44 min
	Middle management	<i>RetailCo</i>	December 2010	35 min
	Employees	Upper-level white-collar	<i>BankCo</i>	March 2011
Upper-level white-collar		<i>BankCo</i>	March 2011	50 min
Upper-level white-collar		<i>BankCo</i>	March 2011	50 min
Upper-level white-collar		<i>FoodB</i>	March 2011	35 min
Upper-level white-collar		<i>FoodB</i>	March 2011	30 min
Upper-level white-collar		<i>RetailCo</i>	December 2010	60 min
Upper-level white-collar		<i>RetailCo</i>	December 2010	35 min
Upper-level white-collar		<i>RetailCo</i>	December 2010	30 min
Lower-level white-collar		<i>BankCo</i>	March 2011	45 min
Lower-level white-collar		<i>BankCo</i>	March 2011	40 min
Lower-level white-collar		<i>BankCo</i>	March 2011	45 min
Lower-level white-collar		<i>FoodA</i>	January 2011	23 min
Lower-level white-collar		<i>FoodA</i>	February 2011	45 min
Lower-level white-collar		<i>FoodA</i>	February 2011	27 min
Lower-level white-collar		<i>FoodB</i>	March 2011	30 min
Lower-level white-collar		<i>RetailCo</i>	December 2010	35 min
Lower-level white-collar		<i>RetailCo</i>	December 2010	35 min
Blue-collar		<i>FoodA</i>	January 2011	41 min
Blue-collar		<i>FoodA</i>	February 2011	32 min
Blue-collar		<i>FoodA</i>	February 2011	28 min
Blue-collar	<i>FoodB</i>	March 2011	25 min	

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Table 1: Descriptions of the firms in which data were collected

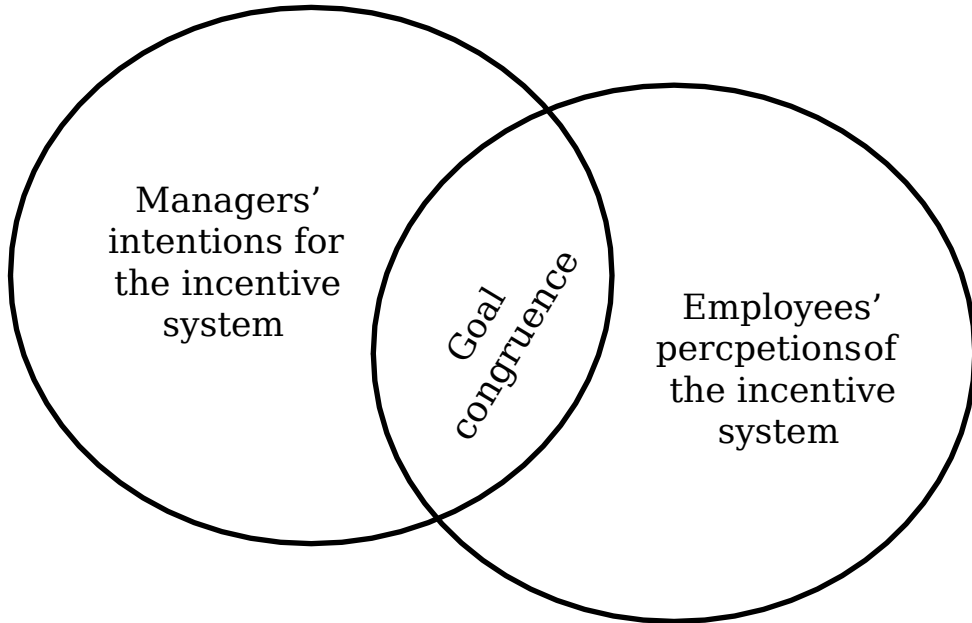
Firm	Industry	Number of personnel
<i>RetailCo</i>	Wholesale management	1,200
<i>BankCo</i>	The financial sector	800
<i>FoodA</i>	The food industry	4,000
<i>FoodB</i>	The food industry	2,500

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Table 2: The incentive systems of the firms

Firm	Max. annual bonus	Payment frequency	Performance metrics
<i>RetailCo</i>	One month's salary	Once a year	Firm figures, department performance, and individual-level BSC-based measurements
<i>BankCo</i>	Two months' salary	Team-based: twice a year; individual level: once per year	Sales targets and other individual- or team-based performance measurements
<i>FoodA</i>	8% of annual pay	Team-based: twice a year; firm-based: once per year	The firm's performance and team-based measurements
<i>FoodB</i> (past system)	420 euros	Three times a year	The firm's performance and team-based measurements

Figure 1: The setting of the study



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Figure 2 The setting of the study

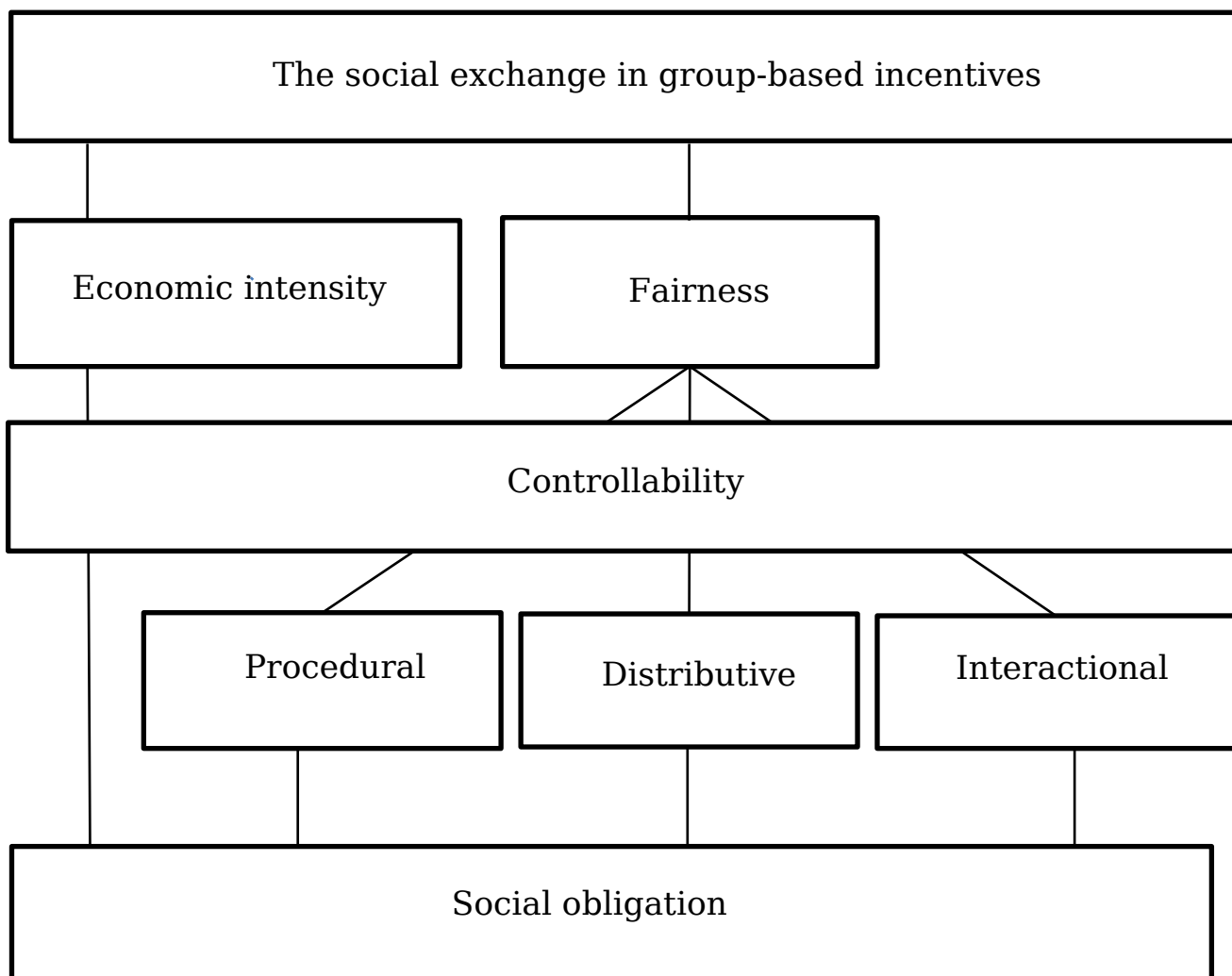
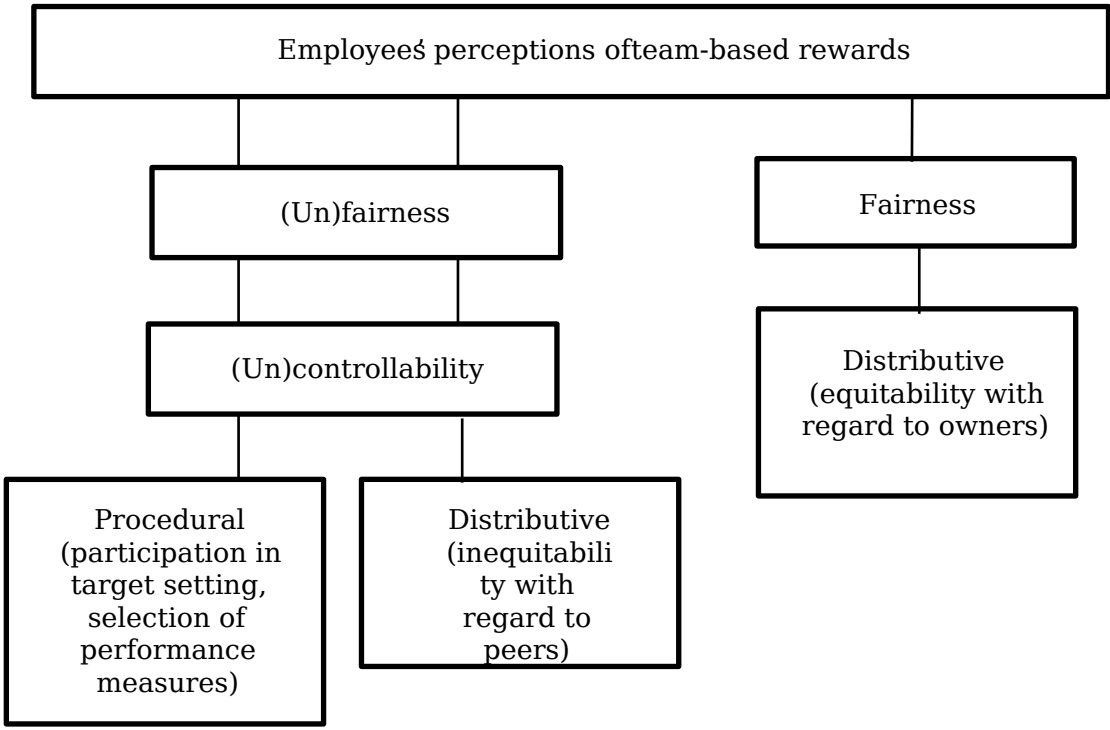
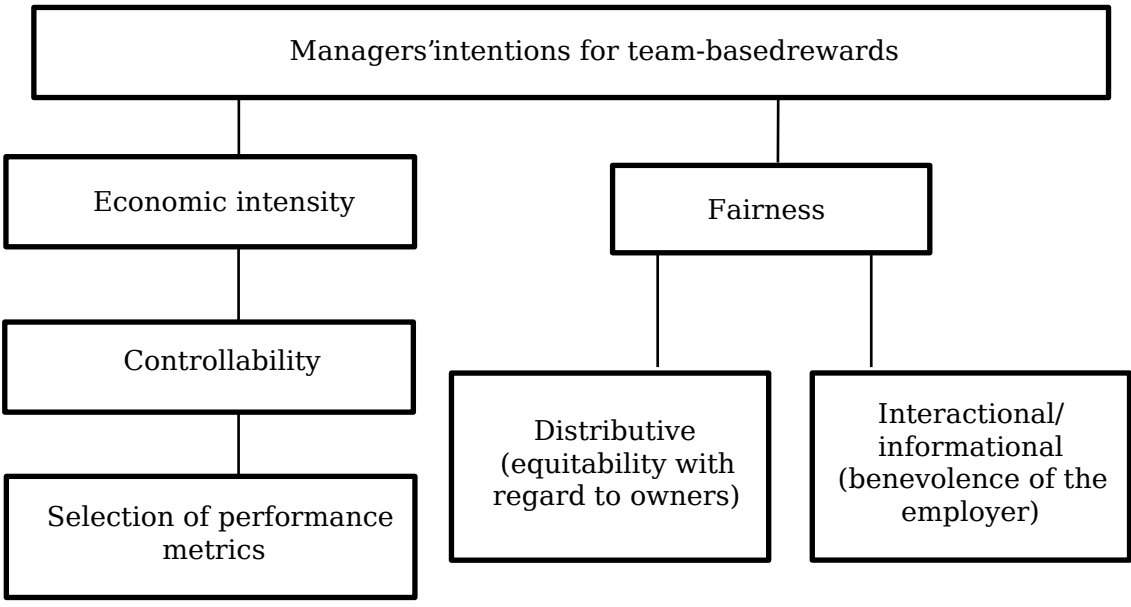


Figure 3: Managerial intentions and employee perceptions of the social exchange in team-based rewards



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Figure 4: Managerial intentions found employee perceptions of the social exchange in profit-sharing

